

Section 10-6: Secants, Tangents, and Angle Measures

By the end of this lesson, you should be able to answer:

- How do you find measures of angles formed by lines intersecting on or inside a circle?
- How do you find measure of angles formed by lines intersecting outside the circle?

Vocabulary:

1. Secant

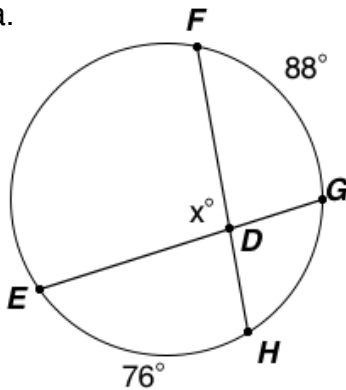
Theorem 10.12 - Two Secants:

Theorem 10.13 - Secant and Tangent:

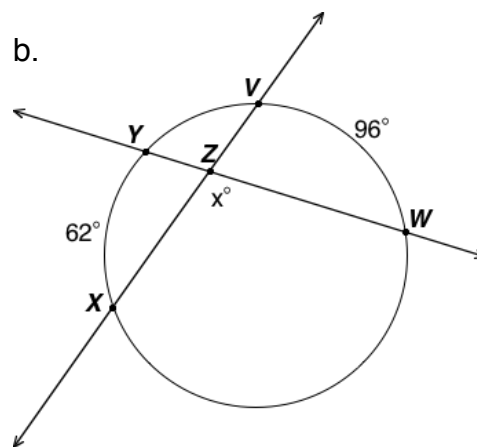
Theorem 10.14 - Exterior Intersection:

Example 1: Find x .

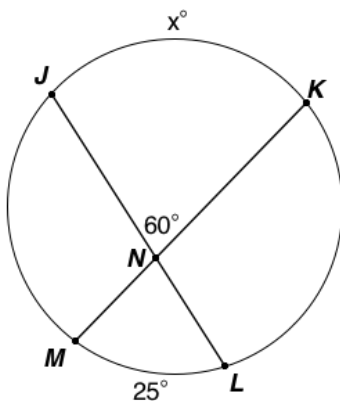
a.



b.

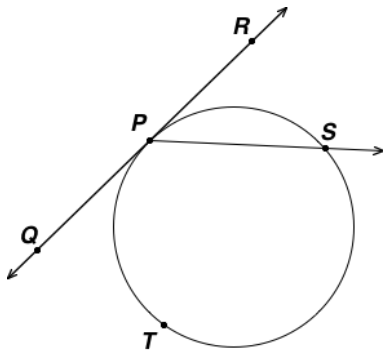


c.

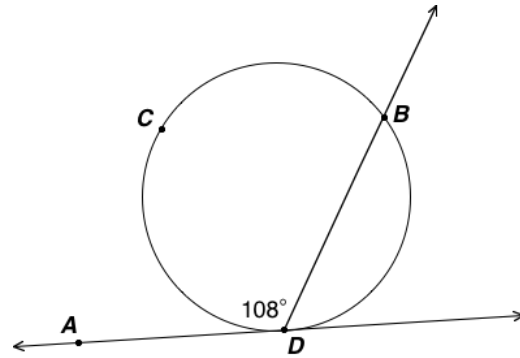


Example 2: Find each measure.

a. $m\angle QPS$ when $m\widehat{PTS} = 250^\circ$

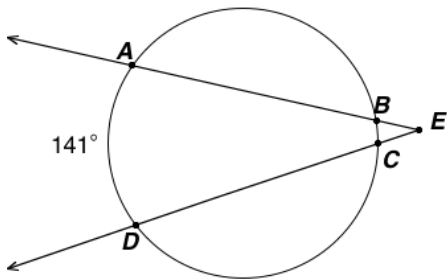


b. $m\widehat{BD}$

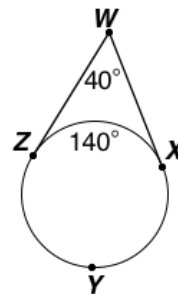


Example 3: Find each measure.

a. $m\widehat{BC}$ when $m\angle AED = 62^\circ$



b. $m\widehat{XYZ}$



Problem Set:

"I hate quotations. Tell me what you know." - Ralph Waldo Emerson